

## RESPONSE

U.S. Appln. No. 09/778,558

the polymer layers and in additional layers of the imaging element so that microvoids are formed (column 6, lines 40-52). This would result in voids which contact each other in the imaging layer (porous ink-receiving layer). Further, Newberry shows that the sheets on the sides of the base paper can be microvoided and that the sheets comprise various polymers (column 7, lines 13-67)." From this, the Examiner concludes that the present invention would have been an obvious modification of the prior art.

Applicants respectfully disagree with the Examiner's conclusion. Newberry and Schlein z at least fail to teach or suggest the presently claimed coating layer (b) coated on a surface of extruded film layer (a), wherein the coating layer is a porous ink-receiving layer with interconnecting voids. Therefore, Newberry and Schlein z do not render obvious the present invention. Applicants invite the Examiner to carefully consider the following point-by-point comparison between the prior art (especially the primary reference Newberry) and the claimed invention.

*coating (b)*  
*extruded film (a)*

Initially, Applicants would like the Examiner to focus on present claims 1 and 6. It is believed that a comparison between the elements of present claims 1 and 6 and Newberry's disclosure best highlights a patentable distinction between the present invention and Newberry.

Claim 1 is drawn to a film. The film of claim 1 comprises (a) an extruded film layer and (b) a coating layer coated on a surface of the extruded film layer (a). Extruded film layer (a) is biaxially stretched and porous. Coating layer (b) is a porous ink-receiving layer with interconnecting voids.

Claim 6 is drawn to a particular embodiment of the film of claim 1. According to claim 6, extruded film layer (a) is coextruded with two other film layers. Specifically, according to claim 6, the film of claim 1 comprises a three-layer coextruded film structure comprising layer (a), core layer (c), and skin layer (d). Just like the film of claim 1, the film of claim 6 comprises a coating layer (b) coated on a surface of layer (a), and coating layer (b) is a porous ink-receiving layer with interconnecting voids. A difference between the film of claim 1 and the film of claim

b  
a

## RESPONSE

U.S. Appln. No. 09/778,558

6 is that in the film of claim 6, layer (a) is necessarily a part of a three-layer coextruded film structure also comprising core layer (c) and skin layer (d).

Keeping the elements of claims 1 and 6 in mind, Applicants would now like to examine Newberry's disclosure.

Newberry's invention relates to imaging materials, especially photographic papers (column 1, lines 5-6).

The object of Newberry's invention, as it is described at column 2, lines 21-33, is to provide an imaging member comprising paper and biaxially oriented polyolefins sheets, wherein the imaging member does not suffer from defects, such as delamination or poor photographic properties. To this end, the crux of Newberry's invention lies in its adhesive layers that bond the polyolefin sheets to the support.

The disclosure at column 3, lines 17-43, especially lines 34-43, along with Fig. 1, is particularly helpful in understanding the structure of Newberry's imaging element. Basically, Newberry's imaging element comprises a support (such as paper or synthetic paper) with a biaxially oriented polyolefin sheet on both sides of the support, and adhesive layers between each sheet and the support.

Newberry's so-called "bottom", "lower side" or "back" sheet is irrelevant to the present invention, including the films of present claims 1 and 6. In this regard, the "bottom", "lower side" or "back" sheet is the sheet on the side of the support away from the image. The "bottom", "lower side" or "back" sheet is described in detail beginning at column 7, line 12, and continuing up to column 9, line 15. Therefore, Newberry's disclosure from column 7, line 12 through column 9, line 15 is irrelevant to the films of the present invention. It is unclear to Applicants why Newberry's disclosure at column 7, lines 13-67 was mentioned at page 3, lines 3-4 and 9-11 of the present Office Action.

The other biaxially oriented polyolefin sheet of Newberry's imaging element is its so-called "top", "upper", "emulsion side", or "face" sheet. Newberry's "top" sheet is described in detail beginning at column 3, line 44, and continuing up to column 6, line 52.

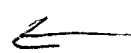
## RESPONSE

U.S. Appl. No. 09/778,558

In particular, Newberry discloses that its "top" sheet may be any suitable biaxially oriented polyolefin sheet (column 3, lines 44-52). According to Newberry, a preferred top sheet is a composite sheet comprising coextruded core and surface layers (column 3, lines 46-48). Newberry's preferred three-layer sheet is described at column 6, lines 40-42 and column 7, lines 3-10.

Thus, Newberry's "top" sheet, as described from column 3, line 44 through column 6, line 52, is somewhat analogous to extruded film layer (a) of present claim 1. Newberry's preferred three-layer sheet is somewhat analogous to the three-layer coextruded film structure comprising layer (a), core layer (c), and skin layer (d) of present claim 6.

At column 6, lines 40-52, Newberry discloses a composite "top" sheet provided with additional layers, such as a 10-layer composite top sheet. These additional layers, however, are still a part of Newberry's composite top sheet. Each of the ten layers would be coextruded and biaxially oriented to form a composite sheet, just as Newberry describes with respect to its preferred three-layer structures (column 6, lines 50-52). In fact, the topmost layer of a 10-layer composite sheet according to Newberry's disclosure is somewhat analogous to extruded film layer (a) of present claim 1. Present claim 1 is directed to a film *comprising* an extruded film layer (a), and does not exclude further layers, *e.g.* nine further layers, coextruded with layer (a).

It must be noted that the voids of Newberry's top sheet are closed cells with virtually no path open from one side of the voided core to the other (column 4, lines 34-37). 

Newberry fails to disclose or at all suggest presently claimed coating layer (b) coated on a surface of extruded layer (a), as recited in present claim 1. Newberry fails to disclose or at all suggest a coating layer (b) that is a porous ink-receiving layer with interconnecting voids, also as recited in present claim 1. Newberry fails to disclose or at all suggest coating layer (b) comprising particles of silica and alumina and a binder of polyvinyl alcohol or gelatin, as recited in present claim 8.

The only disclosure in Newberry regarding a coating on its "top" sheet is presented at column 6, lines 53-63. The disclosure therein does not at all teach or suggest the claimed porous,

## RESPONSE

U.S. Appln. No. 09/778,558

ink-receiving coating layer (b) with interconnecting voids. In fact, Newberry's disclosure about a coating for its top sheet is silent with respect to porosity or the presence of void-initiators.

Schleinz does not make up for the deficiencies of Newberry.

Applicants, on the other hand, have discovered that a coating layer (b) that has interconnecting voids coated on an extruded film layer (a) provides a pathway for an ink to penetrate appreciably into the substrate, thus allowing the substrate to contribute to the dry time (see, the paragraph bridging pages 11 and 12 of the specification). Furthermore, the specification describes how the interconnecting voids in layer (b) may be obtained (see, page 12, lines 3-9). Still further, the specification includes data from comparative experimentation demonstrating the superior results achieved by employing a porous, ink-receiving coating layer (b) that has interconnecting voids versus a non-porous coating layer.

The superior combination of drying time and cyan density achieved by films coated with a porous, ink-receiving coating layer (b) that has interconnecting voids is completely unexpected from Newberry and Schleinz.


For at least the foregoing reason, Applicants respectfully request that the Examiner reconsider and withdraw this §103 rejection.

## II. Conclusion

Reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, she is kindly requested to contact Rick F. James at the telephone number listed below.

ExxonMobil Chemical Company  
4500 Bayway Drive  
Baytown, Texas 77520-9728  
Phone: (281) 834-2438

Respectfully submitted,

  
Darryl M. Tyus  
Registration No. 40,853

For Rick F. James  
Registration No. 48,772